

HSAF10/6VDC S

- Two-port surge arresters type T3 with high-frequency filters for serial connection.
- Intended for protection of electronic appliances against the effects of switching, induced and residual overvoltage in DC power supply systems.
- Contain an improved thermal fuse, which ensures timely disconnection of HSAF*VDC S from the power grid during the MOV's overheating and thus prevents damage to the HSAF*VDC S.
- Installed at the boundaries of LPZ 2 LPZ 3, as close to the device to be protected as possible (no further than 5 m).
- In front of HSAF*VDC S must be installed a lightning current and surge arrester T1 and T2 from HAKEL company.
- **S** indication specifies a version with remote monitoring.

| Туре | | HSAF10/6VDC S |
|--|--------------------|---------------------------|
| Test class according to EN 61643-11:2012 (IEC 61643-11:2011) | | Т3 |
| System | | DC |
| Rated operating DC voltage | U_N | 6 V |
| Maximum continuous operating voltage DC | U _c | 7.2 V |
| Rated load current | I _L | 10 A |
| Open circuit voltage of the combination wave generator (+/-, ±/PE) | U _{oc} | 4 kV |
| Voltage protection level at U _{OC} (+/-) | U_p | < 0.35 kV |
| Voltage protection level at U _{OC} (±/PE) | U_p | < 0.3 kV |
| Nominal discharge current for class II test (8/20) +/-, ±/PE | I _n | 2 kA |
| Total discharge current (8/20) ±->PE | I _{Total} | 4 kA |
| Asymmetrical attenuation of filter at $f = 4 \text{ MHz}$ | | > 80 dB |
| Asymmetrical attenuation of filter at $f = 0.15 \div 30 \text{ MHz}$ | | > 35 dB |
| Response time (+/-) | t _A | < 25 ns |
| Response time (±/PE) | t _A | < 100 ns |
| Power dissipation | Pz | < 2.2 W |
| Maximal back-up fuse | | 10 A gL/gG |
| Residual current | I _{PE} | ≤ 1 800 μA |
| Short-circuit current rating at maximum back-up fuse | I _{SCCR} | 6 kA _{rms} |
| Lightning protection zone | | LPZ 2-3 |
| Housing material | | Polyamid PA6, UL94 V-0 |
| Degree of protection | | IP20 |
| Operating temperature | 9 | -40 ÷ 55 °C |
| Humidity range | RH | 5 ÷ 95 % |
| Recommended cross-section of connected conductors | S | 1.5 mm ² |
| Clamp fastening range (solid conductor) | | $0.2 \div 6 \text{ mm}^2$ |
| Clamp fastening range (stranded conductor) | | 0.2 ÷ 4 mm ² |
| Tightening moment | | 1,2 Nm |
| Installation | | On DIN rail 35 mm |
| | | |

Surge arresters T3 with EMI/RFI filter for DC systems



| Operating position Any Product placement environment Internal Signalling at the device Optic Importance of local signaling OK - red light of FAULT - red light on Remote signalling Yes Potential free signal contact (S) (recommended cross-section of remote monitoring max. 1 mm²) AC: 250 V / 1.5 A, DC: 250 V / 0.1 A Includes EMI / EMC filter Yes Modular design No Lifetime > 100 000 h Designed according to standards IEC 61643-11:2011 Requirements and test methods for SPDs connected to low-voltage power systems IEC 61643-11:2011 Methods of measurement of the suppression characteristics of passive EMC filtering devices UL 94 Safety of Flammability of Plastic Materials UL 94 Application standards UL 94 Protection against lightning IEC 62305:2010 Selection and erection of electrical equipment – Switchgear and controlgear HD 60364-5-53:2022 Selection and application principles for SPDs connected to low-voltage power systems CLC/TS 61643-12:2009 Ordering, packaging and additional data m 180 g Mass m 204 g | Туре | | HSAF10/6VDC S |
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| Signalling at the device Optic Importance of local signaling Remote signalling Recommended cross-section of remote monitoring max. 1 mm²) Recommended cross-section of remote monitoring Recommended Recomme | Operating position | | Any |
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| Remote signalling Remote signal tree signal contact (S) (recommended cross-section of remote monitoring max. 1 mm²) Includes EMI / EMC filter Modular design Lifetime Posigned according to standards Requirements and test methods for SPDs connected to low-voltage power systems Methods of measurement of the suppression characteristics of passive EMC filtering devices Safety of Flammability of Plastic Materials UL 94 Application standards Protection against lightning Selection and erection of electrical equipment – Switchgear and controlgear Selection and application principles for SPDs connected to low-voltage power systems CL C/TS 61643-11:2011 METO 6305:2010 Selection and erection of electrical equipment – Switchgear and controlgear Selection and application principles for SPDs connected to low-voltage power systems Ordering, packaging and additional data Mass m 180 g Mass (including the packaging) m 204 g Packaging dimensions (H x W x D) 60 x 113 x 73 mm Packaging value V 0.5 dm³ ETIM group ETIM group ETIM group ETIM group ETIM group ENSD63010 EAN code 8590681161593 | Signalling at the device | | Optic |
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| | Customs tariff no. | | 85363010 |
| Art. number 30 267 | EAN code | | 8590681161593 |
| | Art. number | | 30 267 |

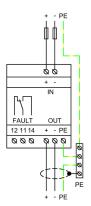


The link in the QR code leads to the online presentation of the **HSAF10/6VDC S**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit **www.hakel.com**





Application wiring diagram (installation)



Internal diagram

